

FIELD PEA

Field Pea, Sowing Date, HRZ South West (Tarrington), Victoria

Field Pea, Variety x Sowing Date, HRZ South West Victoria (Inverleigh)

Authors

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Aim

To evaluate the adaptability of various pulse cultivars to spring sowing compared to an autumn sowing.

Treatments

Varieties: See Table 2.

Sowing dates: See Table 1.

Table 1. Site details

	Inverleigh
Sowing dates	4 May, 24 May
Emergence dates	17 May, 5 June
Stubble	Burnt
Plant density (plant/m ²)	37
Row spacing (cm)	20
Fertiliser (kg/ha) ¹	60

1. MAP (9.2, 20.2, 0, 2.7)

Results and Interpretation

- Key messages: PBA Butler was the highest yielding variety at Inverleigh in 2019 with an average yield of 4.5 t/ha for both sowing dates. Average gross margin for 2019 was \$835/ha with a field pea price of \$400/t. This is the predicted grain price for the 2020, which is lower than the long-term average price of \$459/t.
- Field pea grain yield was not different between 4 May and 24 May sowing dates in 2019, but there was a yield penalty with later sowing dates in other seasons. The free-draining site at Inverleigh did not experience winter waterlogging which is known to reduce field pea yields especially for later sowing dates.
- Disease pressure was low at Inverleigh, 2019. Less than 5% of leaf area was affected by any disease symptom throughout the season. Frost damage increases the susceptibility of field peas to bacterial blight, which and is a risk factor for field peas.

Table 1. Grain yield (t/ha) of a field pea at Inverleigh, Victoria, in 2019 with two sowing dates (S) and eight varieties (V).

Variety (V)	Sowing date (S)		Mean (V)
	4 May	24 May	
PBA Butler	4.8	4.2	4.5
PBA Pearl	4.0	3.7	3.8
OZB1308	3.9	3.6	3.7
OZP1408	4.0	3.5	3.7
PBA Percy	3.2	2.9	3.1
OZP1604	2.7	2.9	2.8
PBA Wharton	3.1	2.6	2.8
Oura	2.6	2.7	2.7
Mean (S)	3.5	3.3	
Factor	Sowing date (S)	Variety (V)	Sowing x Variety (SxV)
LSD	n.s.	0.4	n.s.
P-value	0.055	<0.001	0.332

Table 2. Gross margin* (\$/ha with field pea price of \$400/t) of a field pea at Inverleigh, Victoria, in 2019 with two sowing dates (S) and eight varieties (V).

Variety (V)	Sowing date (S)		Mean (V)
	4 May	24 May	
PBA Butler	1322	1107	1215
PBA Pearl	1049	925	987
OZP1408	1041	884	962
OZB1308	1010	910	960
PBA Percy	762	676	719
PBA Wharton	708	551	629
OZP1604	599	657	628
PBA Oura	566	592	579
Mean (S)	882	788	
Factor	Sowing date (S)	Variety (V)	Sowing x Variety (SxV)
LSD	n.s.	129	n.s.
P-value	0.056	<0.001	0.4001

*Gross margins were calculated using data from the PIRSA 2020 Farm Gross Margin and Enterprise Planning Guide (Rural Solutions SA 2020).